ABSTRACT

Television is one of the secondary needs required by everyone. With the television we can know the events or emerging information discussed at this time. Television can also be a medium of entertainment for families, especially for children who love the cartoon show on television. Sometimes, a few shows on television are less suitable for witnessed by children - minors such as soap operas, gossip and other events. Therefore we need a system that can block the frequency of the event that can help parents to keep the child - their child from the event on television.

Blocker frequency analog television system that is designed on the final project using ATmega8535 Microcontroller, RTC, LCD, oscillator, and a pushbutton. ATmega8535 microcontroller serves as a data processor input of the RTC which will then be displayed to the LCD. Input data to enable the oscillator can be done manually by the user by using the pushbutton, the data format can be input in the form of hours: minutes: seconds. The data will be processed by the microcontroller when it is appropriate, then the base contained in C1730 Transistor Oscillator will get the input voltage of the microcontroller by 0-5 volts which will produce frequencies that can be modified - change according to the input voltage of the microcontroller. Frequency generated by the oscillator has a power greater than the power of television frequencies that cause the television frequencies will be blocked by the oscillator frequency.

The results of this final project is blocking frequency analog television system can work well, for a television with an antenna in the (indoor) was able to block the frequency with distance tool with televisions 1-5 cm, whereas for television with an external antenna (outdoor) were able to block with a frequency range of 1 cm device with television. Thus blocking system analog television frequencies can be used to keep the child parents - their children from the event on television.

Keywords: Mikrokontroler Atmega8535, CVAVR , RTC, Pushbutton, Osilator